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Title of Invention: Blue &	Electro lumes	useest polymen + organs-en der
Inventors (please provide full names):	Byung-He	eSohn: Song Hoon Park: Sou-H
Lee; Shun-Mo Son	: Woon-Ju	na Paek
Earliest Priority Filing Date:	12/24/02	
TORNILL SEFERENCE RESE include	de all pertinent information	m (parent, child, divisional, or issued patent numbers) along with the
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PTO-1590 (8-01)

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L1 STR

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NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED-NUMBER OF NODES IS 20

STEREO ATTRIBUTES: NONE

## MB,820 THOMPSON 10/696,057

=> file zcaplus FILE 'ZCAPLUS' ENTERED AT 13:32:46 ON 12 JUL 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

=> d 17 1 all hitstr ANSWER 1 OF 1 ZCAPLUS COPYRIGHT 2005 ACS on STN L7 2004:570450 ZCAPLUS ΑN 141:131396 DN 16 Jul 2004 Entered STN: ED Blue electroluminescent polymer and organo-electroluminescent device TΙ employing the same Sohn, Byung-Hee; Park, Sang-Hoon; Lee, Soo-Hyoung; Song, In-Sung; IN Son, Jhun-Mo; Paek, Woon-Jung S. Korea PΑ U.S. Pat. Appl. Publ., 19 pp. SO CODEN: USXXCO Patent DT. English LAICM H05B033-12 IC ICS C08G061-12 INCL 428690000; 428917000; 313504000; 313506000; 257040000; 257103000; 528423000 74-13 (Radiation Chemistry, Photochemistry, and Photographic and CC Other Reprographic Processes) Section cross-reference(s): 35, 38 FAN CNT 1

FAN.	CNT 1 PATENT NO.	 	KIND	DATE	APPLICATION NO.	DATE 	
PI	US 20041372	71	A1	20040715	US 2003-743820	200312 24	
	JP 20042042	34	A2	20040722	JP 2003-427007	200312	
	KR 2002-831	86	А	20021224			
CLAS:	S ENT NO.	CLASS	PATENT	FAMILY CLASS	IFICATION CODES		
US 2004137271 ICM ICS		H05B033 C08G061					

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428690000; 428917000; 313504000; 313506000; INCL 257040000; 257103000; 528423000 428/690.000; 428/917.000; 313/504.000; NCL US 2004137271 313/506.000; 257/040.000; 257/103.000; 528/423.000 C08G061/12D1B; C08G073/06H1 ECLA 3K007/AB03; 3K007/AB04; 3K007/DB03; 3K007/FA01; FTERM JP 2004204234 4J032/BA02; 4J032/BA12; 4J032/BA15; 4J032/BA20; 4J032/BB04; 4J032/BB05; 4J032/BB09; 4J032/CA12; 4J032/CA28; 4J032/CB04; 4J032/CB12; 4J032/CB13; 4J032/CG03 The present invention relates to a blue electroluminescent polymer

AΒ having an indolocarbazole unit in the backbone of a polyarylene polymer and an organo-electroluminescent device using the same. Thus, 880 mg bis (1,5-cyclooctadiene) nickel and 500 mg bipyridine were mixed, 346 mg 1,5-cyclooctadiene was added therein and stirred at 80.degree. for 30 min, 102 mg an indolecarbazole monomer (prepn. given) and 790 mg 2,7-dibromo-9,9-dioctylfluorene (prepn. given) were added therein and polymd. to give a copolymer with yield 75%, wt. av. mol. wt. 140,000, and polydispersity 2.71, which was fabricated into a org. electroluminescent device with good max. efficiency and color purity.

blue electroluminescent polymer organo device; ST dibromodioctylfluorene indolecarbazole copolymer prepn

Luminescent substances IT

(electroluminescent; prepn. of blue electroluminescent polymers ' for organo-electroluminescent devices)

Electroluminescent devices IT · (prepn. of blue electroluminescent polymers for organo-electroluminescent devices)

.721945-34-2P 6336-32-9P ΙT (intermediate in monomer prepn.; prepn. of blue electroluminescent polymers for organo-electroluminescent devices)

198964-46-4P, 2,7-Dibromo-9,9-dioctylfluorene 721945-35-3P IT (monomer; prepn. of blue electroluminescent polymers for organo-electroluminescent devices)

721945-36-4P IT

(prepn. of blue electroluminescent polymers for organo-electroluminescent devices)

128-08-5, NBS IT(prepn. of blue electroluminescent polymers for organo-electroluminescent devices)

100-63-0, Phenylhydrazine 637-88-7, Cyclohexane-1,4-dione ΙT 16433-88-8, 2,7-Dibromofluorene 26746-34-9, Bromooctane (reactant in monomer prepn.; prepn. of blue electroluminescent polymers for organo-electroluminescent devices)

721945-36-4P IT

(prepn. of blue electroluminescent polymers for organo-electroluminescent devices)  $% \left( \frac{1}{2}\right) =\frac{1}{2}\left( \frac{1}{2}\right) +\frac{1}{2}\left( \frac{1$ 

RN 721945-36-4 ZCAPLUS

CN Indolo[3,2-b]carbazole, 6,12-dibromo-5,11-dihydro-5,11-dioctyl-, polymer with 2,7-dibromo-9,9-dioctyl-9H-fluorene (9CI) (CA INDEX NAME)

CM 1

CRN 721945-35-3 CMF C34 H42 Br2 N2

CM 2

CRN 198964-46-4 CMF C29 H40 Br2